Doc Code: AP.PRE.REQ

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) APPLE.049A/P3215US1

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on May 11, 2009 · Signature _____ Typed or printed name Peter J. Gutierrez, III	Application Number 10/735,260	Filed 12/11/2003
	First Named Inventor Colin Whitby-Strevens	
	Art Unit 2112	Examiner Abraham, Esaw T.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
        Note: No more than five (5) pages may be provided.

I am the

[ ] applicant/inventor.

[ ] assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

[✓] attorney or agent of record. Registration number 56,732

[ ] attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

Peter J. Gutierrez, III
Typed or printed name

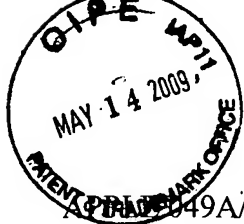(858) 675-1670
Telephone number

05/11/2009
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

[ ] *Total of _____ forms are submitted.

049A/P3215US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Colin Whitby-Stevens	App. No.:	10/735,260
Examiner:	Abraham, Esaw T.	Gr. Art Unit:	2112
Filing Date:	December 11, 2003		
For:	**SYMBOL ENCODING FOR TOLERANCE TO SINGLE BYTE ERRORS**		

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir or Madam:

In response to the Office Action dated March 9, 2009 ("Office Action"), Applicant herein requests a pre-appeal brief review of the above-identified application as follows:

I. CLEAR ERROR IN ASSERTING CLAIMS 57 – 73 ARE ANTICIPATED BY BRIEF ET AL. (U.S. PATENT NO. 5,875,210, HEREINAFTER "BRIEF")

Claim 57 – Applicant respectfully traverses the Examiner's contention that Brief anticipates Applicant's Claim 57 invention. Specifically, Applicant has set forth and claimed *"encoding a symbol comprising a plurality of bits, wherein a most significant bit and a least significant bit of said symbol indicate at least a type of said symbol"*. Some reasons for why such a configuration has advantages in increasing the reliability of transmitting data are described at, for example, paragraph [0029] of Applicant's specification as filed.

Applicant submits that Brief does not teach or suggest a most significant bit <u>and</u> a least significant bit of a symbol indicating at least a type of the symbol. Rather, Applicant submits that Brief appears that it would possess the same disadvantages of the prior art that Applicant discusses at, *inter alia*, paragraphs [0013] and [0014] of Applicant's specification as filed; namely, e.g., single symbol errors being propagated to two symbol errors during encoding.

In addition, Applicant submits that while Brief teaches indicating a symbol type, this appears to only be accomplished via the use of a <u>single</u> bit as indicated by e.g. Col. 16, lines 15 – 20 of Brief which states:

> *"The 4B/5B encoder 72 receives pairs of 4-bit symbols (along with <u>the additional bit</u> indicating whether these symbols represent data or control symbols) from configuration switch 12 and converts them into paired 5-bit symbols, which are transmitted to repeat filter and line state generator 76."* {emphasis added}

In addition, Col. 15, lines 3 – 7 of Brief sets forth:

> *"After identifying the current line state, the line state detector 22 generates a pair of 4-bit symbols representing the current line state (along with <u>an</u> additional <u>bit</u>*

which indicates that the pair of 4-bit symbols represents a control symbol pair)."
{emphasis added}

Accordingly, Applicant submits that the Examiner has committed clear and reversible error in rejecting Claim 57 as being anticipated by Brief.

Claim 68 –Applicant respectfully traverses the Examiner's contention that Brief anticipates Applicant's Claim 68 invention. Specifically, Applicant has set forth and claimed *"a first module to encode a symbol comprising a plurality of bits, wherein the first module indicates a type of said symbol by setting or resetting both a most significant bit and a least significant bit of said symbol"*. As previously discussed, such a configuration has advantages in increasing the reliability of transmitting data, some of which are described at, for example, paragraph [0029] of Applicant's specification as filed.

Applicant submits that Brief does not teach or suggest a first module indicating a type of symbol by setting or resetting both a most significant bit and a least significant bit of the symbol. Rather, Applicant submits that Brief appears that it would possess the same disadvantages of the prior art that Applicant discusses at, *inter alia*, paragraphs [0013] and [0014] of Applicant's specification as filed, namely e.g. single symbol errors being propagated to two symbol errors during encoding.

In addition, Applicant submits that while Brief teaches indicating a symbol type, this appears to only be accomplished via the use of a single bit as indicated by e.g. Col. 16, lines 15 – 20 of Brief which states:

> *"The 4B/5B encoder 72 receives pairs of 4-bit symbols (along with the additional bit indicating whether these symbols represent data or control symbols) from configuration switch 12 and converts them into paired 5-bit symbols, which are transmitted to repeat filter and line state generator 76."* {emphasis added}

In addition, Col. 15, lines 3 – 7 of Brief sets forth:

> *"After identifying the current line state, the line state detector 22 generates a pair of 4-bit symbols representing the current line state (along with an additional bit which indicates that the pair of 4-bit symbols represents a control symbol pair)."* {emphasis added}

Accordingly, Applicant submits that the Examiner has committed clear and reversible error in rejecting Claim 68 as being anticipated by Brief.

II.   CLEAR ERROR IN REJECTING CLAIM 68 UNDER 35 U.S.C. §101 AS BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER

The Examiner alleges that Claim 68 fails to fall within the statutory category of invention, as it *"is directed to a program itself and not a process (method) occurring as a result of executing the program, a machine programmed to operate in accordance with the program*

not a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality." {SIC} Specifically, the Examiner appears to be alleging that although the preamble of Claim 68 calls for a computerized apparatus, the claim combination recites <u>electronic form and source codes</u> <u>which are not process, machine, manufacture or composition of matter.</u>
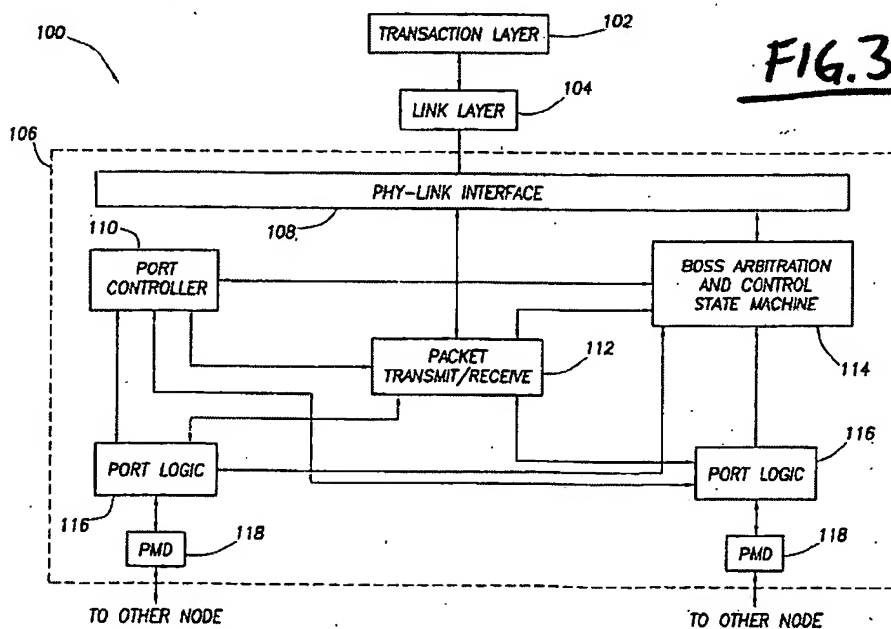
Applicant wholeheartedly disagrees. Claim 68, as previously presented sets forth and claims:

> *68. <u>A computerized apparatus</u> for transmitting data across a communication*
>
> *medium, said apparatus comprising:*
>
> > *<u>a first module to encode a symbol</u> comprising a plurality of bits, wherein the first*
> >
> > *module indicates a type of said symbol by setting or resetting both a most significant bit*
> >
> > *and a least significant bit of said symbol; and*
> >
> > *<u>a second module to transmit the encoded symbol</u> across the communication*
>
> *medium. {emphasis added}*

Paragraph [0026] of Applicant's specification as filed states that *"[e]mbodiments of the present invention can be incorporated into logic contained on PHY 106, or elsewhere as needed."* Furthermore, paragraph [0022] and FIG. 3 of Applicant's specification as filed, explicitly details one exemplary embodiment of the aforementioned PHY 106. FIG. 3 is reproduced below:

FIG.3

It is Applicant's position that the PHY 106 of the embodiment of FIG. 3 clearly comprises apparatus elements, and that elements within Applicant's Claim 68 invention, such as Applicant's second module to transmit the encoded symbol across the communications medium, utilize hardware in order to operate. Accordingly, the Examiner's continued assertion that Claim 68 amounts to *"software per se"* is respectfully in contradiction with both Applicant's claimed language, and Applicant's specification as filed. Applicant submits that it would be impossible to, *inter alia*, transmit the encoded symbol across a communication medium without some form of apparatus involved.

Therefore, Applicant submits that the Examiner has committed clear and reversible error in outright rejecting Applicant's Claim 68 invention as being directed to *"software per se"* in spite of: (i) an express intention to recite *"an apparatus"* in the preamble of Claim 68, as well as (ii) recitation of multiple apparatus elements within the body of the claim (which by their very nature would necessitate some form of physical apparatus in order to operate). Applicant further submits that Applicant's interpretation is clearly supported by, *inter alia*, FIG. 3 of Applicant's specification as filed.

III.   CLEAR ERROR IN ASSERTING CLAIMS 57 – 73 ARE INDEFINITE UNDER 35 U.S.C. §112(2)

Claim 57 – Per page 5 of the Office Action, the Examiner states that: *"Claim 57 recites, 'a most significant bit and a least significant bit of said symbol are adapted to indicate a symbol type'."* Applicant believes that the Examiner is referring to the language in Claim 57 which states: *"wherein a most significant bit and a least significant bit of said symbol indicate at least a type of said symbol"*.

The Examiner states that *"it is unclear how the reliability of transmitting data increases by only indicating a symbol type since there must be some mechanism or techniques such as 'detecting, checking, correcting or inverting' the bits within the symbol for increasing the reliability."* Accordingly, the Examiner's objections with the language of Claim 57 seem to be focused on the fact that Examiner believes other steps must necessarily be present in order to transmit an encoded symbol thereby increasing the reliability of the transmitted data; i.e., that the claim is indefinite because of the breadth of the claim. However, per MPEP § 2173.04:

> *"Breadth of a claim is <u>not</u> to be equated with indefiniteness. In re Miller, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, <u>then the claims comply with 35 U.S.C. 112, second paragraph.</u>"*
> {emphasis added}

Accordingly, Applicant submits that the Examiner has committed clear and reversible error in rejecting Claim 57 under 35 U.S.C. §112(2), because the rejection appears to be solely reasoned on the alleged breadth of Claim 57, in clear contravention of MPEP 2173.04.

Claim 68 – With regards to Claim 68, the Examiner rejects Claim 68 as being incomplete for allegedly omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections (citing MPEP §2172.01). However, Applicant submits that MPEP §2172.01 actually states:

> "...a claim which fails to interrelate essential elements of the invention _as defined by applicant(s) in the specification_ may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention." {emphasis added}

Respectfully, the Examiner has committed clear and reversible error since he has not established _where_ in the specification Applicant has defined the essential elements that are not included in the claim, as required under MPEP 2172.01. The Examiner's apparent trouble with Applicant's claim is, as above, due to the breadth of Claim 68. Hence, a rejection under 35 U.S.C. §112(2) is clearly improper if breadth is the sole basis, and the Examiner has respectfully failed to articulate any other basis. See also _Ex parte Huber,_ 148 USPQ 447, 448-49 (Bd. Pat. App. 1965) (a claim does _not_ necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, are not directly functionally related, do not directly intercooperate, and/or serve independent purposes).
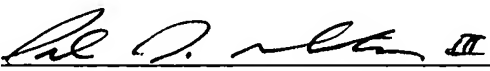
IV.   CONCLUSION

Applicant submits that the Examiner has committed clear and reversible error in rejecting Applicant's claims on a number of independent and distinct bases. Accordingly, Applicant respectfully requests that this application be passed to allowance in accordance with the Pre-Appeal Brief Conference Pilot Program guidelines, or alternatively that prosecution be reopened and that the deficiencies cited herein be addressed by the Examiner in any subsequent actions issued by the Office.

Respectfully submitted,

GAZDZINSKI & ASSOCIATES, PC

Dated: May 11, 2009   By: _____

Peter J. Gutierrez, III
Registration No. 56,732
11440 West Bernardo Court, Suite 375
San Diego, CA 92127
Telephone No.: (858) 675-1670
Facsimile No.: (858) 675-1674

PTO/SB/33 (08-08)
Approved for use through 08/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) APPLE.049A/P3215US1

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on May 11, 2009 · Signature _____ Typed or printed name Peter J. Gutierrez, III	Application Number 10/735,260	Filed 12/11/2003
	First Named Inventor Colin Whitby-Strevens	
	Art Unit 2112	Examiner Abraham, Esaw T.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

✓ attorney or agent of record. 56,732
Registration number _____

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

Peter J. Gutierrez, III
Typed or printed name

(858) 675-1670
Telephone number

05/11/2009
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Colin Whitby-Stevens   App. No.:   10/735,260
Examiner: Abraham, Esaw T.   Gr. Art Unit: 2112
Filing Date: December 11, 2003
For: **SYMBOL ENCODING FOR TOLERANCE TO SINGLE BYTE ERRORS**

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir or Madam:

In response to the Office Action dated March 9, 2009 ("Office Action"), Applicant herein requests a pre-appeal brief review of the above-identified application as follows:

I.   CLEAR ERROR IN ASSERTING CLAIMS 57 – 73 ARE ANTICIPATED BY BRIEF ET AL. (U.S. PATENT NO. 5,875,210, HEREINAFTER "BRIEF")

Claim 57 – Applicant respectfully traverses the Examiner's contention that Brief anticipates Applicant's Claim 57 invention. Specifically, Applicant has set forth and claimed *"encoding a symbol comprising a plurality of bits, wherein a most significant bit and a least significant bit of said symbol indicate at least a type of said symbol"*. Some reasons for why such a configuration has advantages in increasing the reliability of transmitting data are described at, for example, paragraph [0029] of Applicant's specification as filed.

Applicant submits that Brief does not teach or suggest a most significant bit <u>and</u> a least significant bit of a symbol indicating at least a type of the symbol. Rather, Applicant submits that Brief appears that it would possess the same disadvantages of the prior art that Applicant discusses at, *inter· alia*, paragraphs [0013] and [0014] of Applicant's specification as filed; namely, e.g., single symbol errors being propagated to two symbol errors during encoding.

In addition, Applicant submits that while Brief teaches indicating a symbol type, this appears to only be accomplished via the use of a <u>single</u> bit as indicated by e.g. Col. 16, lines 15 – 20 of Brief which states:

> *"The 4B/5B encoder 72 receives pairs of 4-bit symbols (along with <u>the additional bit</u> indicating whether these symbols represent data or control symbols) from configuration switch 12 and converts them into paired 5-bit symbols, which are transmitted to repeat filter and line state generator 76."* {emphasis added}

In addition, Col. 15, lines 3 – 7 of Brief sets forth:

> *"After identifying the current line state, the line state detector 22 generates a pair of 4-bit symbols representing the current line state (along with <u>an</u> additional <u>bit</u>*

which indicates that the pair of 4-bit symbols represents a control symbol pair)."
{emphasis added}

Accordingly, Applicant submits that the Examiner has committed clear and reversible error in rejecting Claim 57 as being anticipated by Brief.

Claim 68 –Applicant respectfully traverses the Examiner's contention that Brief anticipates Applicant's Claim 68 invention. Specifically, Applicant has set forth and claimed *"a first module to encode a symbol comprising a plurality of bits, wherein the first module indicates a type of said symbol by setting or resetting both a most significant bit and a least significant bit of said symbol"*. As previously discussed, such a configuration has advantages in increasing the reliability of transmitting data, some of which are described at, for example, paragraph [0029] of Applicant's specification as filed.

Applicant submits that Brief does not teach or suggest a first module indicating a type of symbol by setting or resetting both a most significant bit and a least significant bit of the symbol. Rather, Applicant submits that Brief appears that it would possess the same disadvantages of the prior art that Applicant discusses at, *inter alia*, paragraphs [0013] and [0014] of Applicant's specification as filed, namely e.g. single symbol errors being propagated to two symbol errors during encoding.

In addition, Applicant submits that while Brief teaches indicating a symbol type, this appears to only be accomplished via the use of a single bit as indicated by e.g. Col. 16, lines 15 – 20 of Brief which states:

> *"The 4B/5B encoder 72 receives pairs of 4-bit symbols (along with <u>the additional bit indicating whether these symbols represent data or control symbols</u>) from configuration switch 12 and converts them into paired 5-bit symbols, which are transmitted to repeat filter and line state generator 76."* {emphasis added}

In addition, Col. 15, lines 3 – 7 of Brief sets forth:

> *"After identifying the current line state, the line state detector 22 generates a pair of 4-bit symbols representing the current line state (along with <u>an</u> additional <u>bit</u> which indicates that the pair of 4-bit symbols represents a control symbol pair)."* {emphasis added}

Accordingly, Applicant submits that the Examiner has committed <u>clear and reversible error</u> in rejecting Claim 68 as being anticipated by Brief.

II.   CLEAR ERROR IN REJECTING CLAIM 68 UNDER 35 U.S.C. §101 AS BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER
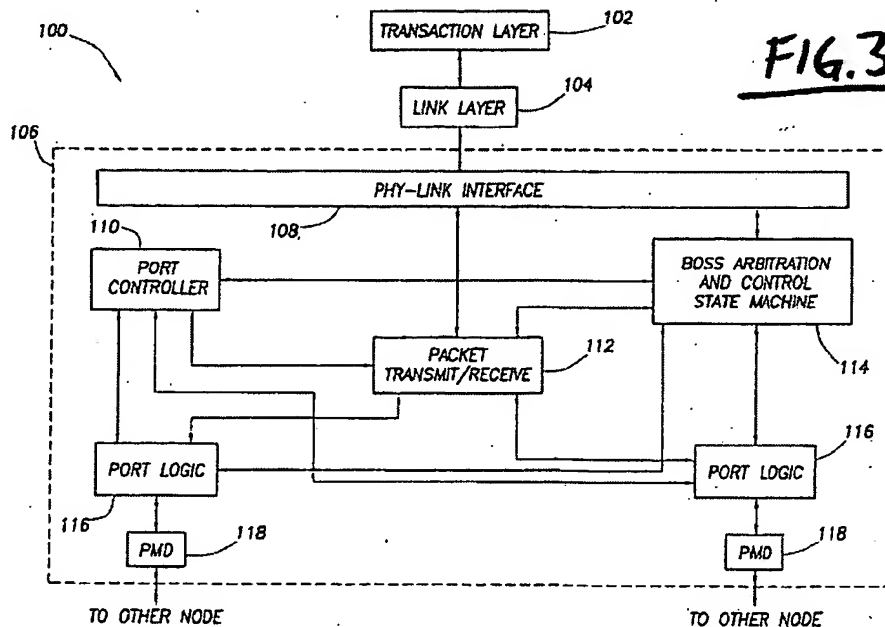
The Examiner alleges that Claim 68 fails to fall within the statutory category of invention, as it *"is directed to a program itself and not a process (method) occurring as a result of executing the program, a machine programmed to operate in accordance with the program*

not a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality." {SIC} Specifically, the Examiner appears to be alleging that although the preamble of Claim 68 calls for a computerized apparatus, the claim combination recites <u>electronic form and source codes which are not process, machine, manufacture or composition of matter.</u>

Applicant wholeheartedly disagrees. Claim 68, as previously presented sets forth and claims:

> *68. <u>A computerized apparatus</u> for transmitting data across a communication medium, said apparatus comprising:*
>
> *<u>a first module to encode a symbol</u> comprising a plurality of bits, wherein the first module indicates a type of said symbol by setting or resetting both a most significant bit and a least significant bit of said symbol; and*
>
> *<u>a second module to transmit the encoded symbol</u> across the communication medium.* {emphasis added}

Paragraph [0026] of Applicant's specification as filed states that *"[e]mbodiments of the present invention can be incorporated into logic contained on PHY 106, or elsewhere as needed."* Furthermore, paragraph [0022] and FIG. 3 of Applicant's specification as filed, explicitly details one exemplary embodiment of the aforementioned PHY 106. FIG. 3 is reproduced below:

It is Applicant's position that the PHY 106 of the embodiment of FIG. 3 clearly comprises apparatus elements, and that elements within Applicant's Claim 68 invention, such as Applicant's second module to transmit the encoded symbol across the communications medium, utilize hardware in order to operate. Accordingly, the Examiner's continued assertion that Claim 68 amounts to *"software per se"* is respectfully in contradiction with both Applicant's claimed language, and Applicant's specification as filed. Applicant submits that it would be impossible to, *inter alia*, transmit the encoded symbol across a communication medium without some form of apparatus involved.

Therefore, Applicant submits that the Examiner has committed clear and reversible error in outright rejecting Applicant's Claim 68 invention as being directed to *"software per se"* in spite of: (i) an express intention to recite *"an apparatus"* in the preamble of Claim 68, as well as (ii) recitation of multiple apparatus elements within the body of the claim (which by their very nature would necessitate some form of physical apparatus in order to operate). Applicant further submits that Applicant's interpretation is clearly supported by, *inter alia*, FIG. 3 of Applicant's specification as filed.

III.   CLEAR ERROR IN ASSERTING CLAIMS 57 – 73 ARE INDEFINITE UNDER 35 U.S.C. §112(2)

Claim 57 – Per page 5 of the Office Action, the Examiner states that: *"Claim 57 recites, 'a most significant bit and a least significant bit of said symbol are adapted to indicate a symbol type'."* Applicant believes that the Examiner is referring to the language in Claim 57 which states: *"wherein a most significant bit and a least significant bit of said symbol indicate at least a type of said symbol"*.

The Examiner states that *"it is unclear how the reliability of transmitting data increases by only indicating a symbol type since there must be some mechanism or techniques such as 'detecting, checking, correcting or inverting' the bits within the symbol for increasing the reliability."* Accordingly, the Examiner's objections with the language of Claim 57 seem to be focused on the fact that Examiner believes other steps must necessarily be present in order to transmit an encoded symbol thereby increasing the reliability of the transmitted data; i.e., that the claim is indefinite because of the breadth of the claim. However, per MPEP § 2173.04:

> *"Breadth of a claim is <u>not</u> to be equated with indefiniteness. In re Miller, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, <u>then the claims comply with 35 U.S.C. 112, second paragraph</u>."*
> {emphasis added}

Accordingly, Applicant submits that the Examiner has committed clear and reversible error in rejecting Claim 57 under 35 U.S.C. §112(2), because the rejection appears to be solely reasoned on the alleged breadth of Claim 57, in clear contravention of MPEP 2173.04.

Claim 68 – With regards to Claim 68, the Examiner rejects Claim 68 as being incomplete for allegedly omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections (citing MPEP §2172.01). However, Applicant submits that MPEP §2172.01 actually states:

> "...a claim which fails to interrelate essential elements of the invention <u>as defined by applicant(s) in the specification</u> may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention." {emphasis added}

Respectfully, the Examiner has committed clear and reversible error since he has not established *where* in the specification Applicant has defined the essential elements that are not included in the claim, as required under MPEP 2172.01. The Examiner's apparent trouble with Applicant's claim is, as above, due to the breadth of Claim 68. Hence, a rejection under 35 U.S.C. §112(2) is clearly improper if breadth is the sole basis, and the Examiner has respectfully failed to articulate any other basis. See also *Ex parte Huber,* 148 USPQ 447, 448-49 (Bd. Pat. App. 1965) (a claim does <u>not</u> necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, <u>are not directly functionally related, do not directly intercooperate</u>, and/or serve independent purposes).
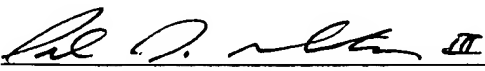
IV.   CONCLUSION

Applicant submits that the Examiner has committed clear and reversible error in rejecting Applicant's claims on a number of independent and distinct bases. Accordingly, Applicant respectfully requests that this application be passed to allowance in accordance with the Pre-Appeal Brief Conference Pilot Program guidelines, or alternatively that prosecution be reopened and that the deficiencies cited herein be addressed by the Examiner in any subsequent actions issued by the Office.

Respectfully submitted,

GAZDZINSKI & ASSOCIATES, PC

Dated: May 11, 2009   By: _____

Peter J. Gutierrez, III
Registration No. 56,732
11440 West Bernardo Court, Suite 375
San Diego, CA 92127
Telephone No.: (858) 675-1670
Facsimile No.: (858) 675-1674